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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,605	12/29/2003	Cheryl J. Brickey	86683PAL	6529

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Paul A. Leipold
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

BUI PHO, PASCAL M

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/747,605

Applicant(s)

BRICKEY ET AL.

Examiner

Pascal M. Bui-Pho

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office action is responsive to communications filed on 03 March 2006. Presently, claims 1-10 and 13-29 are pending.

Drawings

1. The drawings were received on 03 March 2006. These drawings are not acceptable.
2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because of insufficient quality. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 9** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On line 2, it is unclear what the applicants refer to as an "emissive element emits light in greater than 1 wavelength". Units of measurement are also required. Herein, "emitting light in greater than 1 wavelength" will be considered as "pulsating more than one instant".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6, 7, 9, 13-19, 21, 22, 24, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshima et al. (US 5,932,139).

With regards to claim 1, Oshima et al. disclose in Figs. 44-46 a timing device comprising an indicator device (80) and a detector (104) wherein said indicator device comprises the combination of a light-emissive element (84, 90, 91) and a patterning layer (88) wherein said indicator device moves relative to said detector device using transport (92) and rollers (99).

With regards to claim 6, Oshima et al. disclose a timing device wherein said detector is sensitive to the wavelength of light emitted by said light-emissive element (Column 59, lines 28-61).

With regards to claim 7, Oshima et al. disclose a timing device wherein said light-emissive element emits light in pulses since excitation light (101) emits light in pulses (Column 31, lines 45-51).

With regards to claim 9, Oshima et al. disclose a timing device wherein said light-emissive element emits light in greater than 1 wavelength (pulsating) and said detector is capable of sensing more than 1 wavelength (Column 31, lines 45-51; Column 59, lines 28-61).

With regards to claim 13, Oshima et al. disclose a timing device wherein said timing device is provided with a shield (107) that only allows the detector to receive light from a small portion of said indicator device.

With regards to claim 14, Oshima et al. disclose a timing device wherein said timing device is provided with light focusing or directing lenses (103, 108).

With regards to claim 15, Oshima et al. disclose a timing device wherein said indicator element is in an arcuate (circular) shape (Column 41, lines 6-25).

With regards to claim 16, Oshima et al. disclose a timing device wherein said indicator element is in a tubular shape, one of ordinary skill in the art would recognize a disc having a thickness as a tube (Column 41, lines 6-25).

With regards to claim 17, Oshima et al. disclose a timing device wherein said indicator element is in a tubular shape with the light-emissive element emitting light on the exterior (top) surface of the tube (Column 41, lines 6-25).

With regards to claim 18, Oshima et al. disclose a timing device wherein said indicator element is in a disk (Column 41, lines 6-25).

With regards to claim 19, Oshima et al. disclose a timing device wherein said indicator element is in a strip (Fig. 45).

With regards to claim 21, Oshima et al. disclose a timing device wherein said patterning layer comprises a pattern formed by a dye transfer image (Column 40, lines 22-27).

With regards to claim 22, Oshima et al. disclose a timing device wherein said patterning layer comprises a pattern formed by ink jet printing (Column 32, line 48 – Column 34, line 38).

With regards to claim 24, Oshima et al. disclose a timing device wherein said patterning layer comprises a pattern formed by conductive inks, elements such as Al and Fe are known in the art to be conductive (Column 36, line 58 – Column 37, line 53).

With regards to claims 28, Oshima et al. disclose a timing device wherein said indicator device has an angle of view of between 1 and 50 degrees (Fig. 44).

With regards to claim 29, Oshima et al. disclose a timing device wherein said indicator device has an angle of view of between 5 and 15 degrees (Fig. 44).

7. Claims 1, 2, 13-15, and 19 are further rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al. (US 2003/0040346).

With regards to claim 1, Fukuda et al. disclose in Figs. 1 and 20 a timing device comprising an indicator device (12) and a detector (18) wherein said indicator device comprises the combination of a light emissive-element (58) and a patterning layer (24) wherein said indicator device moves relative to said detector.

With regards to claim 2, Fukuda et al. further disclose a timing device wherein said emissive element (58) comprises electroluminescent material.

With regards to claim 13, Fukuda et al. further disclose a timing device wherein said timing device is provided with a shield (10) that only allows the detector to receive light from a small portion of said indicator device.

With regards to claim 14, Fukuda et al. further disclose a timing device wherein said timing device is provide with light focusing or directing lenses (18, 28).

With regards to claim 15, Fukuda et al. further disclose a timing device wherein said indicator element is in an arcuate shape (Fig. 1A).

With regards to claim 19, Fukuda et al. further disclose an indicator element wherein said indicator element is in a strip (planar).

8. Claims 1, 2, 6, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Borza (US 5,920,384).

With regards to claim 1, Borza discloses in Fig. 5 a timing device comprising an indicator device and a detector (32, 51) wherein said indicator device comprises the combination of a light-emissive element (4a, 27) and a patterning layer (28) wherein said indicator device moves relative to said detector.

With regards to claim 2, Borza further discloses a timing device wherein said emissive element (4a, 27) comprises electroluminescent material.

With regards to claim 6, Borza further discloses a timing device wherein said detector (32, 51) is sensitive to the wavelength of light emitted by said light-emissive element (4a, 27), such feature is inherent in order to image.

With regards to claim 14, Borza further discloses a timing device wherein said timing device is provided with light focusing or directing lenses (34; Figs. 1 and 8-10).

With regards to claim 19, Borza further discloses an indicator element wherein said indicator element is in a strip (planar).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 2-5, 8, 20, 23, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al. (US 5,932,139).

With regards to claims 2, 3, and 8, Oshima et al. disclose in Figs. 44-46 a timing device comprising a light-emissive element (84; 90, 91), but lack a clear inclusion of an electroluminescent material, an organic light-emitting diode, and/or pixels. At the time of the invention, however, it would have been obvious to one of ordinary skill in the art to modify Oshima et al. accordingly in order to provide a long lasting life of the light source and greater light modulation control.

With regards to claims 4, 5, and 26, Oshima et al. disclose a timing device comprising an indicator (80), but lacks a clear inclusion of a desired bending stiffness, radius, and/or density. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Oshima et al. accordingly in order to provide optimal performance and detection.

With regards to claims 20, 23, 25, and 27, Oshima et al. disclose a timing device comprising patterning and non-patterning layers, but lacks a clear specification/method of forming said layers. At the time of the invention, however, it would have been obvious to one of ordinary skill in the art to modify Oshima et al. and select a particular mean and/or method of forming a patterning layer to provide a desired quality of the design of the system, if so desired.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al. (US 5,932,139) in view of Trimble (US 3,666,946).

With regards to claim 10, Oshima et al. disclose in Figs. 44-46 a timing device comprising a detector (104), but lacks a clear specification of said detector comprising more than one sensor. In an analogous photoluminescent art, Trimble discloses in Fig. 1 a timing device

comprising a detector (46) comprising more than one sensor (54). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Oshima et al. in view of Trimble in order to acquire more reliable sensing results.

Response to Arguments

12. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

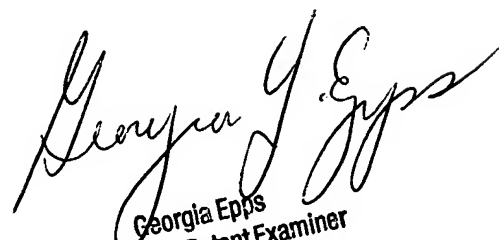
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pascal M. Bui-Pho whose telephone number is (571) 272-2714.

The examiner can normally be reached on Monday through Friday: 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pascal M. Bui-Pho
Examiner, Art Unit 2878
10 May 2006


Georgia Epps
Supervisory Patent Examiner
Technology Center 2800